

AMENDMENTS TO THE CLAIMS

Claims 1-13. (Canceled)

14. (Currently Amended) A method for machining a scroll wrap, comprising:
forming a stationary scroll having an end plate and a scroll wrap extending from said end plate thereof, said scroll wrap of said stationary scroll having a side face,
forming a slewing scroll having an end plate and a scroll wrap extending from said end plate thereof, said scroll wrap of said slewing scroll having a side face,
wherein said side face of said stationary scroll wrap and said side face of said slewing scroll wrap are configured to slide with respect to each other in use; and
Hale-machining said side face of one of said stationary scroll wrap and said slewing scroll wrap by moving along a longitudinal direction of said one of said stationary scroll wrap and said slewing scroll wrap a non-rotational ~~tool~~ blade ~~along a longitudinal direction of said one of said stationary scroll wrap and said slewing scroll wrap~~ such that machined at one time is a portion of said side face, of said one of said stationary scroll wrap and said slewing scroll wrap, extending substantially for a height of said one of said stationary scroll wrap and said slewing scroll wrap.

15. (Currently Amended) The method for machining a scroll wrap according to claim 14, wherein the non-rotational ~~tool~~ blade has a length greater than a the height of said one of said stationary scroll wrap and said slewing scroll wrap.

16. (Previously Presented) The method for machining a scroll wrap according to claim 14, further comprising:

cutting-machining by end milling both said side face of said one of said stationary scroll wrap and said slewing scroll wrap and a surface of said end plate from which said one of said stationary scroll wrap and said slewing scroll wrap extends,

wherein both said Hale-machining and said cutting-machining are performed while the one of said stationary scroll and said slewing scroll having said one of said stationary scroll wrap and said slewing wrap is fixed in a chuck.

17. (Currently Amended) The method for machining a scroll wrap according to claim 14, further comprising:

machining a surface of said end plate from which said one of said stationary scroll wrap and said slewing scroll wrap extends with the same non-rotational ~~tool~~ blade used for said Hale-machining of said side face of said one of said stationary scroll wrap and said slewing scroll wrap; and

performing a finish cutting with a different non-rotational ~~tool~~ blade than that used for said Hale-machining of said side face of said one of said stationary scroll wrap and said slewing scroll wrap;

wherein said Hale-machining, said machining, and said finish cutting are performed while the one of said stationary scroll and said slewing scroll having said one of said stationary scroll wrap and said slewing scroll wrap is fixed in a chuck.

18. (Currently Amended) The method for machining a scroll wrap according to claim 14, further comprising: simultaneously machining a surface of said end plate from which said one of said stationary scroll wrap and said slewing scroll wrap extends with the same non-rotational ~~tool~~ blade used for said Hale-machining of said side face of said one of said stationary scroll wrap and said slewing scroll wrap.

19. (Currently Amended) The method for machining a scroll wrap according to claim 14, further comprising: machining a surface of said end plate from which said one of said stationary scroll wrap and said slewing scroll wrap extends with a different non-rotational ~~tool~~ blade than that used for said Hale-machining of said side face of said one of said stationary scroll wrap and said slewing scroll wrap.

20. (Previously Presented) The method for machining a scroll wrap according to claim 14, wherein

said side face of said one of said stationary scroll wrap and said slewing scroll wrap includes an inner side face and an outer side face; and

wherein said Hale-machining is performed on said inner side face and said outer side face in any one of an order from said inner side face to said outer side face and an order from said outer side face to said inner side face.

21. (Previously Presented) The method for machining a scroll wrap according to claim 14, wherein said Hale-machining of said side face of said one of said stationary scroll wrap and said slewing scroll wrap is performed such that a resulting surface roughness of said side face of said one of said stationary scroll wrap and said slewing scroll wrap measures one micrometer at most.

22. (New) The method for machining a scroll wrap according to claim 15, further comprising:

cutting-machining by end milling both said side face of said one of said stationary scroll wrap and said slewing scroll wrap and a surface of said end plate from which said one of said stationary scroll wrap and said slewing scroll wrap extends,

wherein both said Hale-machining and said cutting-machining are performed while the one of said stationary scroll and said slewing scroll having said one of said stationary scroll wrap and said slewing wrap is fixed in a chuck.

23. (New) The method for machining a scroll wrap according to claim 15, further comprising:

machining a surface of said end plate from which said one of said stationary scroll wrap and said slewing scroll wrap extends with the same non-rotational blade used for said

Hale-machining of said side face of said one of said stationary scroll wrap and said slewing scroll wrap; and

performing a finish cutting with a different non-rotational blade than that used for said Hale-machining of said side face of said one of said stationary scroll wrap and said slewing scroll wrap;

wherein said Hale-machining, said machining, and said finish cutting are performed while the one of said stationary scroll and said slewing scroll having said one of said stationary scroll wrap and said slewing scroll wrap is fixed in a chuck.

24. (New) The method for machining a scroll wrap according to claim 15, further comprising: simultaneously machining a surface of said end plate from which said one of said stationary scroll wrap and said slewing scroll wrap extends with the same non-rotational blade used for said Hale-machining of said side face of said one of said stationary scroll wrap and said slewing scroll wrap.

25. (New) The method for machining a scroll wrap according to claim 15, further comprising: machining a surface of said end plate from which said one of said stationary scroll wrap and said slewing scroll wrap extends with a different non-rotational blade than that used for said Hale-machining of said side face of said one of said stationary scroll wrap and said slewing scroll wrap.

26. (New) The method for machining a scroll wrap according to claim 15, wherein said side face of said one of said stationary scroll wrap and said slewing scroll wrap includes an inner side face and an outer side face; and

wherein said Hale-machining is performed on said inner side face and said outer side face in any one of an order from said inner side face to said outer side face and an order from said outer side face to said inner side face.

27. (New) The method for machining a scroll wrap according to claim 15, wherein said Hale-machining of said side face of said one of said stationary scroll wrap and said slewing scroll wrap is performed such that a resulting surface roughness of said side face of said one of said stationary scroll wrap and said slewing scroll wrap measures one micrometer at most.

28. (New) The method for machining a scroll wrap according to claim 14, wherein Hale-machining said side face of said one of said stationary scroll wrap and said slewing scroll wrap by moving said non-rotational blade along the longitudinal direction of said one of said stationary scroll wrap and said slewing scroll wrap results in an entirety of said side face of said one of said stationary scroll wrap and said slewing scroll wrap being machined in one pass of said non-rotational blade.

29. (New) The method for machining a scroll wrap according to claim 28, wherein the non-rotational blade has a length greater than the height of said one of said stationary scroll wrap and said slewing scroll wrap.

30. (New) The method for machining a scroll wrap according to claim 28, further comprising:

cutting-machining by end milling both said side face of said one of said stationary scroll wrap and said slewing scroll wrap and a surface of said end plate from which said one of said stationary scroll wrap and said slewing scroll wrap extends,

wherein both said Hale-machining and said cutting-machining are performed while the one of said stationary scroll and said slewing scroll having said one of said stationary scroll wrap and said slewing wrap is fixed in a chuck.

31. (New) The method for machining a scroll wrap according to claim 28, further comprising:

machining a surface of said end plate from which said one of said stationary scroll wrap and said slewing scroll wrap extends with the same non-rotational blade used for said Hale-machining of said side face of said one of said stationary scroll wrap and said slewing scroll wrap; and

performing a finish cutting with a different non-rotational blade than that used for said Hale-machining of said side face of said one of said stationary scroll wrap and said slewing scroll wrap;

wherein said Hale-machining, said machining, and said finish cutting are performed while the one of said stationary scroll and said slewing scroll having said one of said stationary scroll wrap and said slewing scroll wrap is fixed in a chuck.

32. (New) The method for machining a scroll wrap according to claim 28, further comprising: simultaneously machining a surface of said end plate from which said one of said stationary scroll wrap and said slewing scroll wrap extends with the same non-rotational blade used for said Hale-machining of said side face of said one of said stationary scroll wrap and said slewing scroll wrap.

33. (New) The method for machining a scroll wrap according to claim 28, further comprising: machining a surface of said end plate from which said one of said stationary scroll wrap and said slewing scroll wrap extends with a different non-rotational blade than that used for said Hale-machining of said side face of said one of said stationary scroll wrap and said slewing scroll wrap.

34. (New) The method for machining a scroll wrap according to claim 28, wherein said side face of said one of said stationary scroll wrap and said slewing scroll wrap includes an inner side face and an outer side face; and

wherein said Hale-machining is performed on said inner side face and said outer side face in any one of an order from said inner side face to said outer side face and an order from said outer side face to said inner side face.

35. (New) The method for machining a scroll wrap according to claim 28, wherein said Hale-machining of said side face of said one of said stationary scroll wrap and said slewing scroll wrap is performed such that a resulting surface roughness of said side face of said one of said stationary scroll wrap and said slewing scroll wrap measures one micrometer at most.